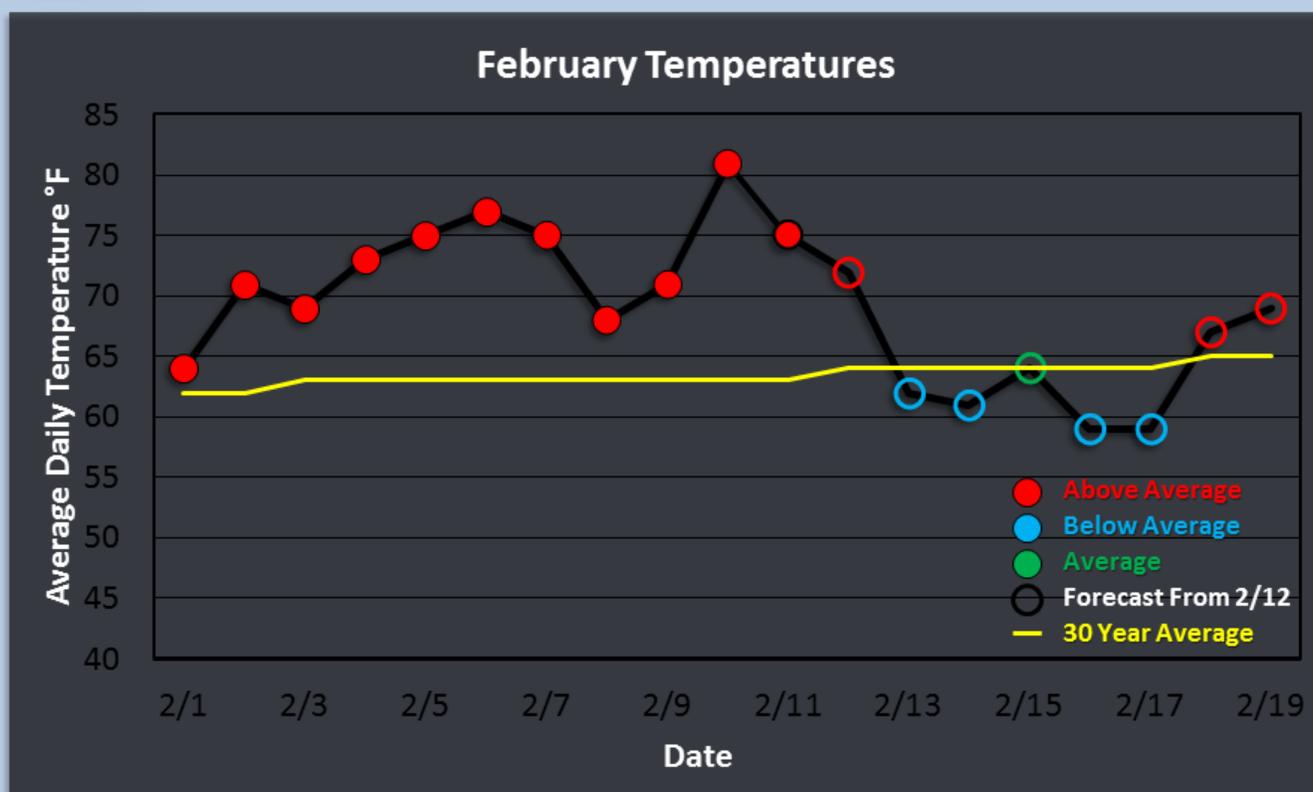




A Warm Start To February



Note: Single day average temperatures are generally computed as the sum of the maximum and minimum divided by two. For continuous observation locations, such as the three primary Valley airports, one could also approximate the average by totaling all the hourly observations and dividing by 24.

Another Month, Another Above “Normal” Finish? Mid to Late February “Rollercoaster” Won’t Stop the Overall Warmth

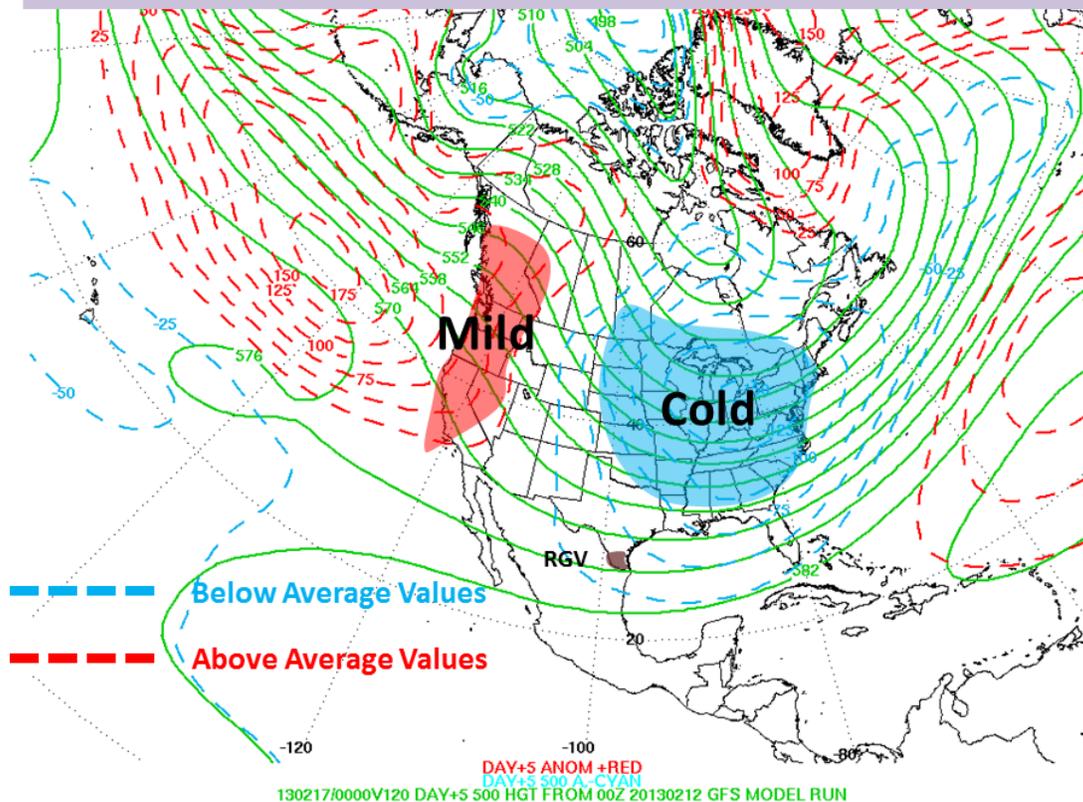
Chances for a Freeze Quickly Fading Away; Drought Persists

February 2013 came in like a lamb – an *April* lamb – as temperatures for the first twelve days were closer to those seen in early April than the start of February. Daytime temperatures in the 80s, even reaching the lower 90s, made winter, even by Valley standards, virtually irrelevant; the increase in sun angle combined with the warm days and somewhat sultry, humid nights brought a quick period of initial growth to trees/brush in the Valley, including juniper and mesquite, before the month was halfway completed. Those warm days and balmy nights had temperatures across the Valley between 9 and 10° above “normal” as late as February 12th.

How the Month May Finish: Maintaining a sweltering, record-breaking warm (or cold) pace is difficult in any month, and February 2013 is no exception. A subtle change in the jet stream winds (next page) will allow more frequent intrusions of cooler air, each followed by a day or two of warming, particularly after the 15th. There are no signs that arctic air will reach the Valley through month’s end. With the average last date of a freeze well past in most areas, the chances for a crop-damaging freeze or frost are quickly approaching nil. The cooling will only take the overall temperatures to or perhaps just below average for the last two weeks of February,

guaranteeing the month finishes several degrees above the long term average, and extending the streak at Brownsville to 25 months, Harlingen to 14 months, and McAllen to 35 of the past 36 months since March, 2010, above the 1981-2010 benchmark.

“Jet Stream” Pattern, Focused on February 16/17



Above: After a warm stretch to begin February 2013 across the southern U.S., general flow from western Canada/Alaska southeast into much of the Lower 48 states will bring an overall cooler weather pattern. The Rio Grande Valley is forecast to be on the western edge of the pattern, ending the persistent warmth and humidity. **Click on the photo** to view a loop of the February 12th - 20th forecast pattern from the Global Forecast System model. Note the rapid movement of low and high pressure systems from the Rockies through the eastern U.S. in the loop.

No Way Out for the Drought. The above graphic as well as the daily model forecast shown in the loop, indicate little or no rainfall for the Rio Grande Valley through at least February 20th. Extrapolating the forecast through the end of the month shows little change to the overall pattern, which brings precious little moisture deep into the atmosphere to produce significant rainfall. The eight to fourteen day precipitation forecast (below) indicates equal chances for above or below average rainfall, but the “lean” is toward below average, as fast moving low pressure areas will track too far north to lift the atmosphere into anything more than a few showers along each front. A better opportunity for rain is shown across east Texas.

The bottom line? Actual rainfall, and necessary rainfall across the Rio Grande Basin and watershed well into New Mexico and southern Colorado will remain limited. Lake levels, currently running just above 30% capacity at both Amistad and Falcon International Reservoir, will remain low and will likely drop a bit more with periodic dry air and slowly increasing evaporation rates.

Precipitation Forecast for February 20-26, 2013

● General Outline of the Rio Grande Basin

